

5'-GCAGGTCTGAGTTCAAGGACAGCCTGGTCTACGCATTGAGTTCTAGAACAGCCAAGGCTACACAAAGA 68
 ATCCCTGTCTTAAAAACAAAAACAATAAAAAACAAACAAACAAAAACAAACAAAAACAAACAAAAAGACCA 147
 ATGGGGGAAAAAAGAAAGAAAAACAAGAAAGAAAAAGAATAGCTTCCCTGTTCTCTGCAGGGTAGTTTATAGTAATG 226
 AATGCTCAAAGCTCCACAGTCTATGGCACCCAAGTGGTATTCTTATATTGTTTGCACTAATACTATCC ATG AAA GGC 302
 M K G 3
 CTG GCT GGC GAG TGG CAT CAG GAC TCT GGC CTA GAC ATC AGG GAG AAG GCA GAA GAC TTC 362
 L A G E W H Q D S G L D I R E K A E D F 23
 TCC CTG CCC TGG CTG CTG CCT AGA TTG ATG GCC TTA GTC ATG CAG GAA GAA GGA AGG TTC 422
 S L P W L L P R L M A L V M Q E E G R F 43
 AGA AGT GAC AGG AAT CAT GGG TAT TTA AGG GAA TGG CTT AGG ATT CAG GCA CTG ACA GCT 482
 R S D R N H G Y L R E W L R I Q A L T A 63
 TGT CTG CCT TCC CCT CTG GGG AGG GTC CAC TAT GCC CAG TGT TCA CCG AAA CAA AAA GGA 542
 C L P S P L G R V H Y A Q C S P K Q K G 83
 AGG CTG CCA AGA GGC TGG GCT TCT CTG CCA TCC CTA AGT GTG CTT GTC AGG GCT CTG AGA 602
 R L P R G W A S L P S L S V L V R A L R 103
 GCG TCT AAC GCT TTC TCA CTC GGG AAC TAC TAC TGC TGT CCG TGG AGG GGG ACA AGA TGG 662
 A S N A F S L G N Y Y C C P W R G T R W 123
 GCC AAA GGG CAG CCG GGA GAG TGG GCA AGG CCA AGG GCG AGC TCA CCT TCT GCG CAC CGA 722
 A K G Q P G E W A R P R A S S P S A H R 143
 GAA GGC GTG GCA GTG ACA TGA AAC ATT AGG TCA CAT GGC CTT CCC CTC CGG CCT TAG CGT 782
 E G V A V T * 149
 GCCTACACATCTGCACAGAGAAGGAGAAGAGGTTGAGGAGAGAATAGAGCAGTACAGAGCCAACCTCAAACAGCAGCAGC 861
 AGACAGAGAGCAGCAGAGACAGAAGGTGAGGGCGCAGGAGGAGGAGCGGGCCAGAAGGGACAGTGACGAGACAGGGAAA 940
 TGAGCAAGGGAGGCAGGGGTGGGGGCAGAACCTCCCATCATGCACTTCCGACAGGTCACTCAGAGGTACAGGGAACAT 1019
 GTGGCAGGCCTAGGGACCAAAGCCATGAAGGTTTCTGTGGTCAAGCCATGTGCTGCTTCTGGGAGGGACATCTGCTGC 1098
 CCTAGTTAAGCATGGTAGTGAGTGACAACCTTGGGTTTCCAATGCCACAGCAGGAACCGGACCTGGCTTTATACCTT 1177
 CTGCCTCCACAGACATTCTGGGCCAGGGTACCAGAAGGGGCTCACTGCCGCTTATATCCTCTCCCTCCTCCACAGG 1256
 CCATGCTGTCTAAGAACACAGTGGACAGTGGCCACATGGGGATCCCAAGCAGGACAGGGCTCAAGGCTGGAGACAGACT 1335
 TGTAAATCGTGCTGAGGGGGAAGGTATATGACACCTTTGCAAACTGGGTAAGTGAAGAGAGGAAGTGTACGACAGCC 1414
 CAACCGAAGCCCCCTCCCCCAGTACTGTGAAGCCTGTCAATCCACAGGGGTGGGACTTCGGCTTACGGTCTCCTG 1493
 CAACCAGGACCTTTCACACACCCCAACCTTCTGCCTGGGTCACTGTAGCTGATCCCAGAGGACTAGCACTTTATGTTTC 1572
 AGTACTGATGGATGGTAAGAGACAGCAGAATTGCTGAGTTATGGAGGAGGCAACAAGACCTCTTCAGAAACACAGCTA 1651
 ACTACCCACAAGACCAGAACCAGGCTGTCCAGACCCCTGCATGGAAACATGGAGGGATGGAACGGTCAGGGAGGGGGGC 1730
 AGGAGCATGGCTAGGATCTGGCATGAGGTGTGCTGGGCATAGAAGGAGTAGGGGCCCCAGGTAGGTTCTGGGCTCAGAG 1809
 AAGGCATGATAGAAGCTAGACACATAAGTCATAATGGCTTCTCATCTGGCCGGGCAGTTTCGACGATGCTTCAGCATC 1888
 CAGCATTTTAGGGATGTCCAGGGAACCTCTCTGCCACATCATAGCCGTGTTTCACTTGTGAGTAAGGATCATCCTAAAGA 1967
 GAAGCACCAAGTGAGCCTACAGAGAGGACACAGGTACAGTCGATTCCGAGATGGGAGGTGTGTGTGTGTGTGTGTGTG 2046
 TG 2125
 GTCAGTAGTTAGAGGTTTGAACATTCTCTCCCCATCACTCTTCAGTATGGAAATGGGGGAAGAGAATACATAGGCC 2204
 TGATCTTAGAGTTGGAGTAGGAAAGAACTAAGAAGTGGGGTTGAGAGCCATCAGTTCTGGCAGGAGACATGGGTAAATC 2283
 GACTCAGACTTAGTCCCCCCCCCCCCCTGTCTGAACCTCAATAGTTGGGATAGGTGCTCTTAACCTATAAAGATTA 2362
 GTGAGAAGTTGAAGCTGACCCACCATGGATTCCCATGTGTGGGTTATTCTAAGTAGCCATGGCTTTTTTAGTGGCCTC 2441
 TGTGATCTTTTCTCGAAAGCTAAATGGGGAGAGCTGGCAAAGGATGTTGGGGACTCTGGGATCCTTGACATCCCGGAGTG 2520
 TACTTCAAACATGGAGGTAATGTAAATGGAGTTAGGTGCTCCTCAGCCAGGAGCCACACTGCTCAGTCAGTCTCA 2599
 TAAGATGGTGGGCTGCTGTGGAGGGCGCATGGAGGGTCCCCAAAAAGTTATACTCCTGCATAAGGCCAGGGATTAT 2678
 T-3' (SEQ ID NO: 1) 2679

FIG. 1

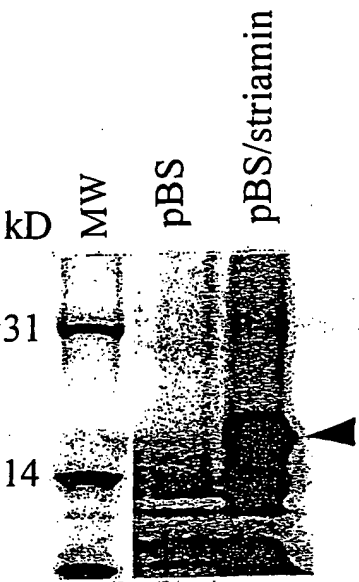
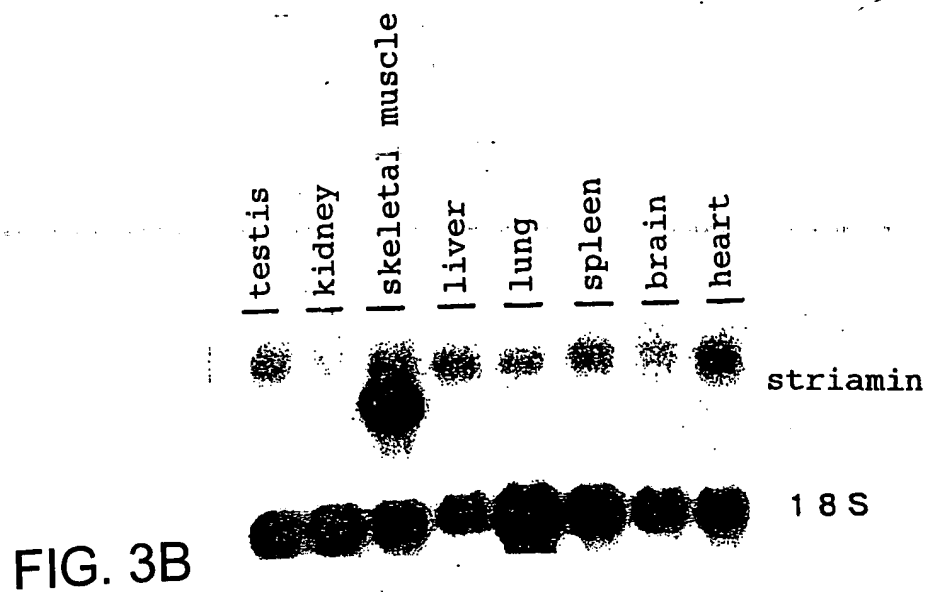
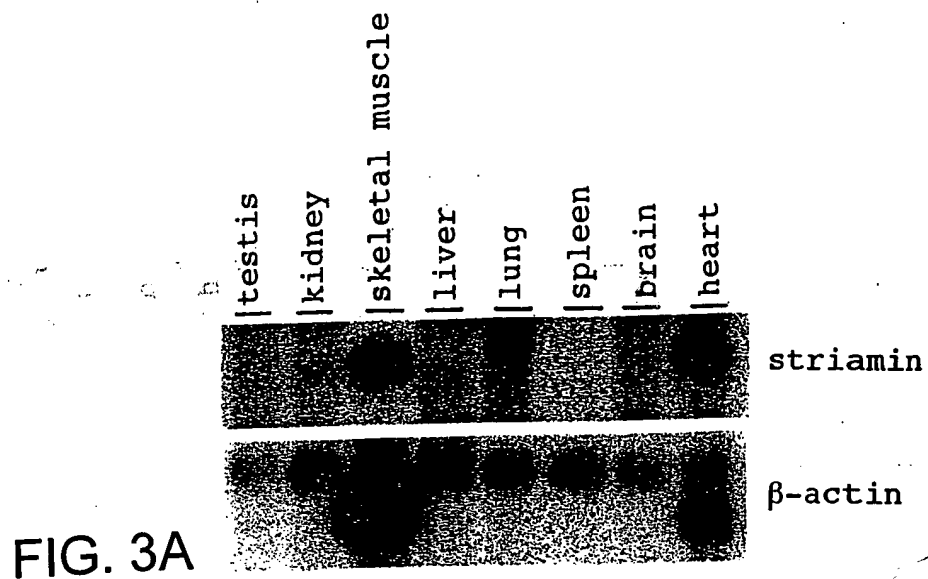


FIG. 2A



FIG. 2B



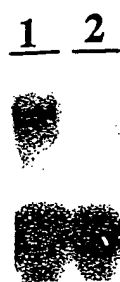


FIG. 4A

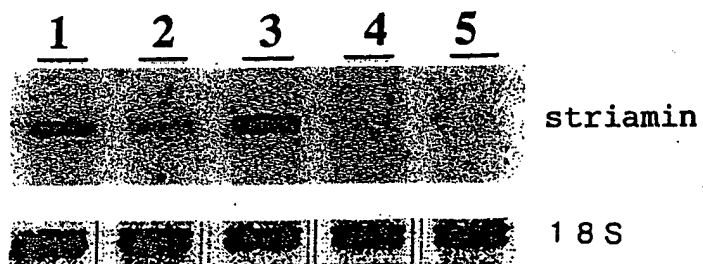


FIG. 4B

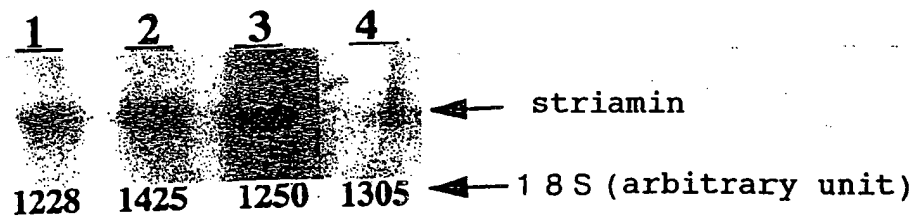


FIG. 4C

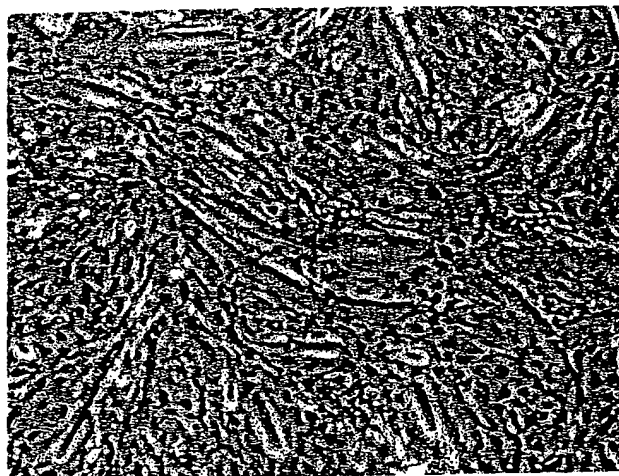


FIG. 5A

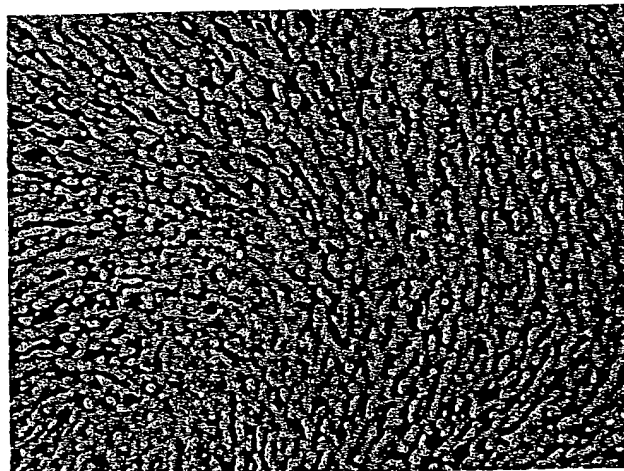


FIG. 5B

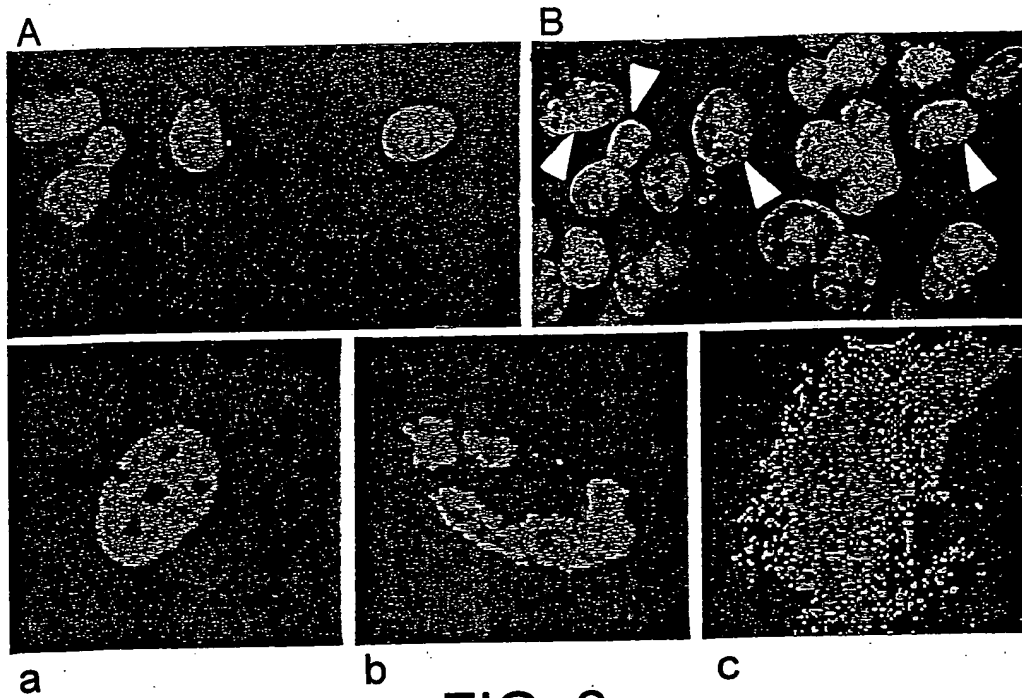


FIG. 6

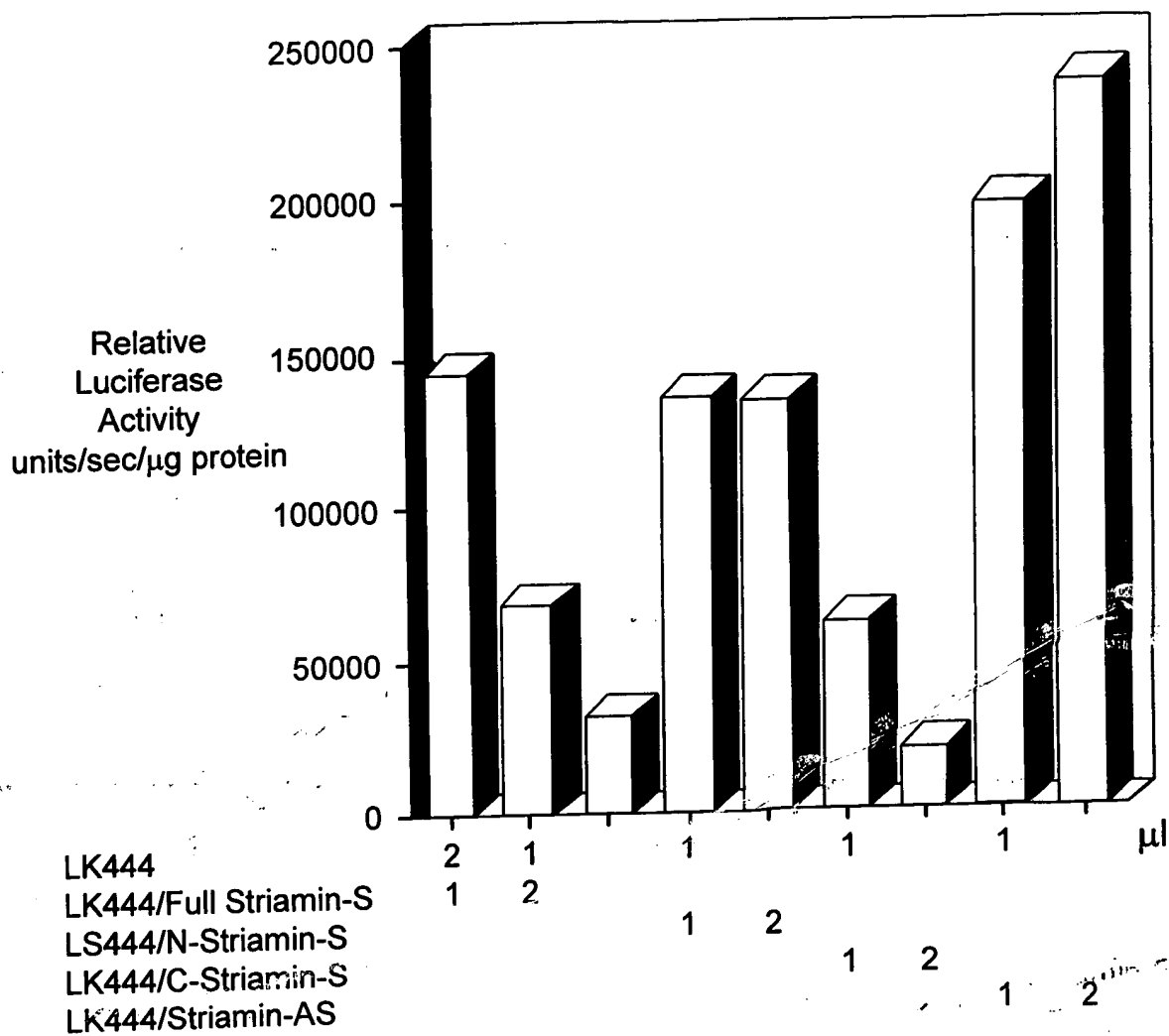


FIG. 7

FIG. 8A

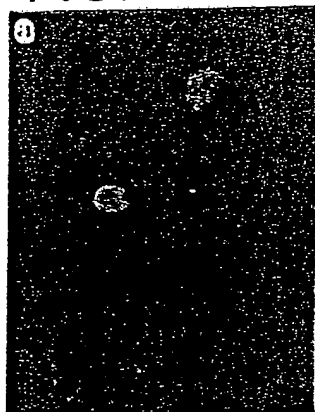


FIG. 8B

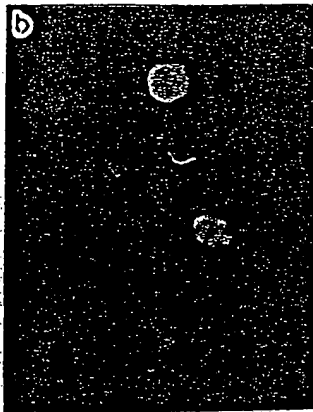


FIG. 8C

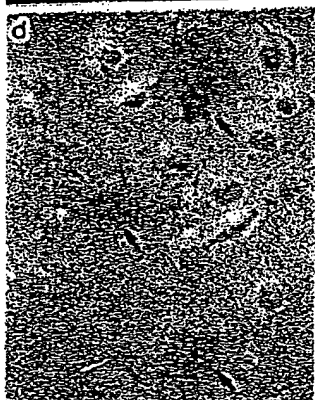
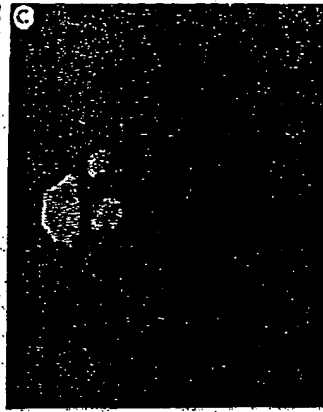


FIG. 8D

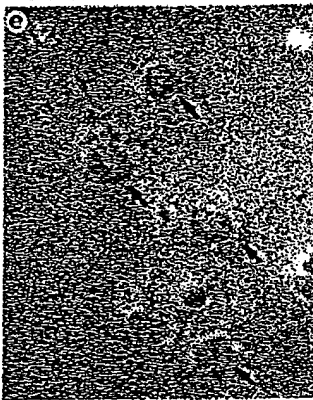


FIG. 8E

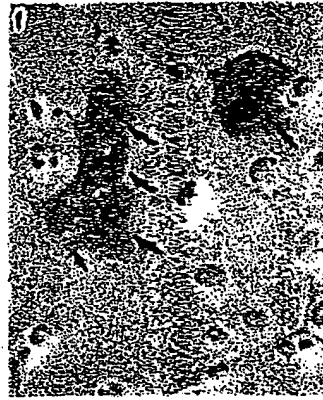


FIG. 8F

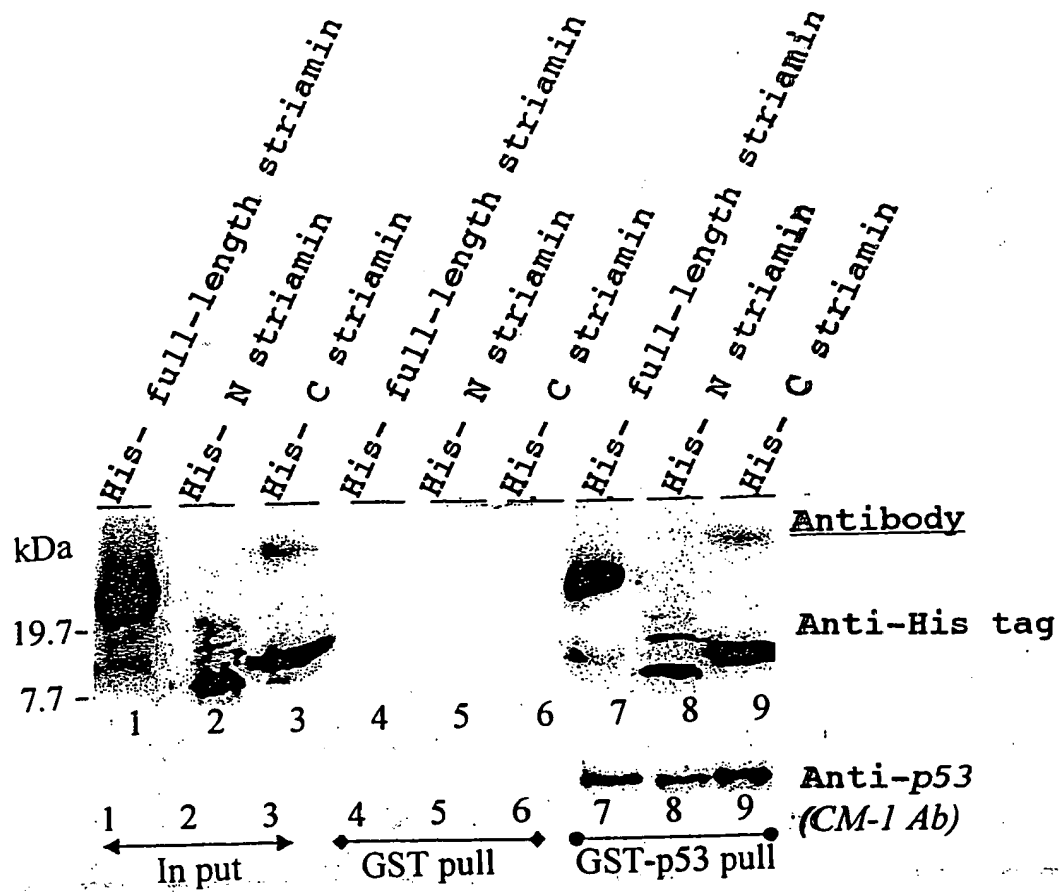


FIG. 9

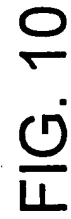


FIG. 10

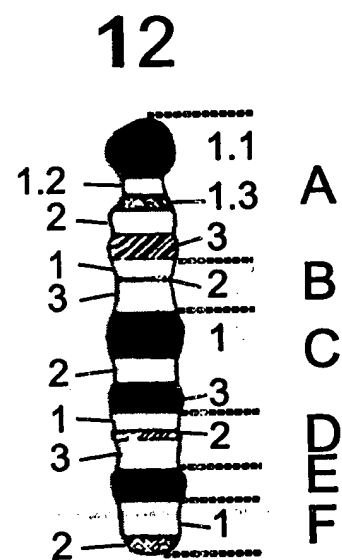


FIG. 11

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☒ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.